

WE CLAIM:

1. A method of dynamically managing non-volatile memory items on a wireless device through a network, said method comprising the steps of:

when connecting to said network, checking for a unique identifier item stored in said non-volatile memory items;

if said unique identifier item exists, checking whether a value stored in said unique identifier is the same as a software identifier located in software on said wireless device;

if said unique identifier item does not exist or said value is different from said software identifier, sending said software identifier along with an identifier indicating a carrier to said network;

receiving from said network a set of changes related to said software identifier;

executing said set of changes to update said non-volatile memory items; and

writing said software identifier to said unique identifier item.

2. The method of claim 1, wherein said identifier and said software identifier are operating system version numbers of software on said wireless device.

3. The method of claim 1, wherein said writing step is performed after said updating is complete.

4. The method of claim 1, wherein said updating allows rollback to a previous software version.

5. The method of claim 4, wherein said updating step preferably creates a new non-volatile memory item rather than replacing an existing non-volatile memory item to facilitate rollback to said existing non-volatile memory item.

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6. The method of claim 5, wherein said updating step does not delete non-volatile memory items that have previously been created.

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7. The method of claim 6, wherein non-volatile memory items managed under other NV management policies are not updated in said updating step.

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8. The method of claim 5, wherein software on said wireless device includes a mapping from old non-volatile memory items to new non-volatile memory items.

9. The method of claim 8, wherein said mapping is modified using said set of changes.

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10. A method for dynamically managing non-volatile memory items on a wireless device during registration to a network, said method allowing rollback to previous versions of software using said non-volatile memory items, said method comprising the steps of:

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on registration, checking the non-volatile memory items for a unique identifier item;

if said unique identifier item exists, checking whether a value in said unique identifier item is the same as a software identifier;

if said unique identifier item does not exist or if said identifier is different from said software identifier, performing the steps of:

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sending said software identifier along with an identifier indicating a carrier to said network;

receiving a set of changes from said network to update said non-volatile memory items, said updating step:

creating a new non-volatile memory item rather than replacing an existing non-volatile memory item to facilitate rollback;

5 retaining non-volatile memory items that have previously been created; and

avoiding non-volatile memory items created by traditional provisioning mechanisms; and

writing said software identifier to said unique identifier item,

10 whereby said creating, retaining, and avoiding steps in said updating step allow rollback to previous versions of software on said wireless device.

10. A wireless communications device comprising:

15 a receiver for receiving signals from a network;

a transmitter for transmitting signals to a network;

a digital signal processor for processing signals to be sent on said transmitter and received on said receiver;

a microprocessor communicating with said digital signal processor;

20 non-volatile memory having program storage and non-volatile memory items, said non-volatile memory communicating with said microprocessor; and input and output subsystems interacting with said microprocessor, said microprocessor including:

25 means for checking said non-volatile memory items for a unique identifier item;

means for checking whether a value stored in said unique identifier item is the same as a software identifier;

means for updating said non-volatile memory;

wherein if said means for checking said non-volatile memory for a unique

30 identifier item finds that said unique identifier item does not exist or said means for checking whether said value finds said value is different from said software

identifier, said wireless device sends said software identifier to said network and receives a set of changes from said network, said means for updating said non-volatile memory executing said set of changes.

- 5 11. The wireless device of claim 10, wherein said identifier and said software identifier are operating system version numbers of software in said program storage.